

Title (en)
POLYMER AND LIGHT CONTROL DEVICE

Title (de)
POLYMER UND LICHTSTEUERUNGSVORRICHTUNG

Title (fr)
POLYMÈRE ET DISPOSITIF DE COMMANDE DE LUMIÈRE

Publication
EP 4389779 A1 20240626 (EN)

Application
EP 22858243 A 20220721

Priority
• JP 2021134575 A 20210820
• JP 2022028374 W 20220721

Abstract (en)
Provided is a polymer capable of being suitably used for an optical control element useful in shorter wavelength bands than the C band. A polymer represented by the formula (1). [In the formula (1), R_{A1} and R_{A2} are each independently an alkyl group having 1 to 10 carbon atoms, an aryl group having 6 to 12 carbon atoms, or an alkyl aryl group having 7 to 15 carbon atoms, hydrogen atoms contained in the alkyl group, the aryl group, and the alkyl aryl group are optionally substituted with halogen atoms, and R_{A1} and R_{A2} are optionally linked to each other to form a 3- to 12-membered saturated alicyclic structure together with a carbon atom to which they are bonded. X represents a phenylene group, an ethylene group, or a phenylenevinylene group, R_{D1} represents an alkanediyl group having 1 to 10 carbon atoms, R_{D2} represents an alkyl group having 1 to 10 carbon atoms, and any carbon atoms contained in R_{D1} and R_{D2} are optionally linked to each other to form a 3- to 12-membered saturated heterocyclic structure together with a nitrogen atom to which R_{D1} and R_{D2} are bonded. Y represents a linking group. Po represents a polymer structure].

IPC 8 full level
C08F 8/00 (2006.01); **C08F 20/36** (2006.01); **G02F 1/061** (2006.01); **G02F 1/361** (2006.01)

CPC (source: EP US)
C08F 8/10 (2013.01 - EP); **C08F 8/30** (2013.01 - EP); **C08F 20/36** (2013.01 - EP); **C08F 220/14** (2013.01 - US); **C08F 220/1811** (2020.02 - EP); **G02B 1/046** (2013.01 - US); **G02F 1/3617** (2013.01 - EP); **C08F 2810/00** (2013.01 - US); **G02F 1/061** (2013.01 - EP)

C-Set (source: EP)
1. **C08F 220/1811 + C08F 220/36**
2. **C08F 8/10 + C08F 220/36**
3. **C08F 8/30 + C08F 220/36**

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4389779 A1 20240626; JP 2023028707 A 20230303; US 2024352167 A1 20241024; WO 2023021921 A1 20230223

DOCDB simple family (application)
EP 22858243 A 20220721; JP 2021134575 A 20210820; JP 2022028374 W 20220721; US 202218684153 A 20220721